

Name: \_\_\_\_\_

Failure to show all work will result in a LaSalle.  
Need help?

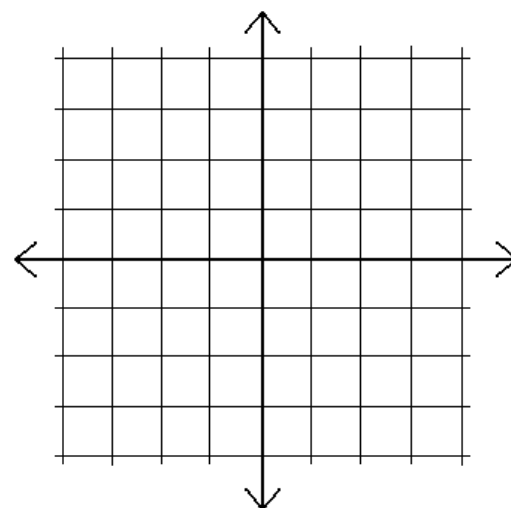
GRE 301: Locate points on the number line and in the first quadrant.	1. Plot the point (4, -2). What would happen if the point were shifted 3 units in the positive x-direction and 5 units in the negative y-direction?	<div>3. The line below on the coordinate plan passes through point B. Which of the following point could also be a point on this line?</div> <div><p>A coordinate plane with x and y axes. A line passes through the y-axis at (0, 2) and the x-axis at (-4, 0). Point B is marked on the line at (-2, 1).</p></div> <div>A. (2, 0) B. (3, 4) C. (3, 3) D. (4, -3) E. (12, 6)</div>
	2. (a,b) is plotted in the standard coordinate plane. If a is positive and b is negative what quadrant is the point in?	
GRE 504: Find the midpoint of a line segment	4. Draw a number line. Explain how you can find the mid-point between 18 and -6.	<div>6. Find the midpoint between (3, -2) and (-1, 5). Draw a graph!</div>
	5. Find the midpoint between -20 and 5.	

7. Write everything you know about:

Parallel lines	Perpendicular lines

8. Graph the line:

$$4x+2y=8$$



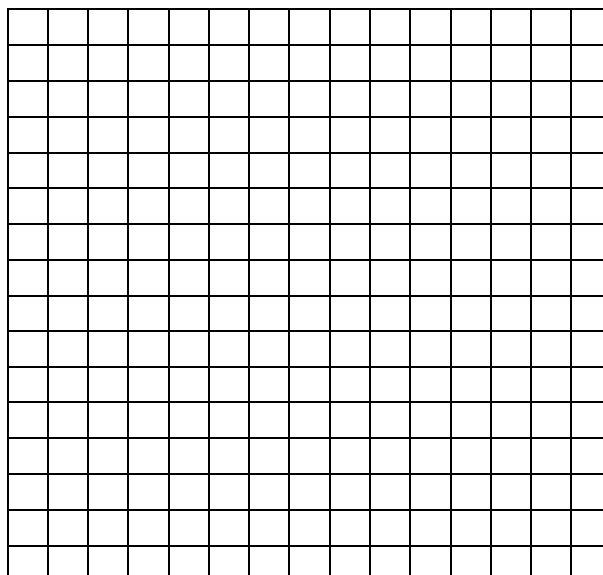
9. Write an equation for a line that is parallel. Graph it above.

10. Write an equation for a line that is perpendicular. Graph it above.

11. Write an equation for a line that passes through point (1,3) and is parallel to  $6x-2y=10$ .

12. Write an equation for a line that is perpendicular and passes through the same point.

13. Graph the original line and the two lines you created.



14. Write the equation of a line that is parallel to  $y = 2x + 1$  and goes through the point (-2,-7).

Explain your reasoning.

15. Write the equation of a line that is parallel to  $y = -.5x + 1$  and goes through the point (3,8).

Explain your reasoning.

16. Suppose the line  $f(x)$  goes through the points (0,3) and (5,8). Write the equation of the line that is parallel to  $f(x)$  and goes through the point (-4,-2).

17. Suppose the line  $f(x)$  goes through the points (0,3) and (5,8). Write the equation of the line that is parallel to  $f(x)$  and goes through the point (-4,-2).